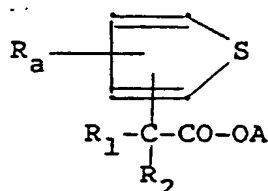


Patent Claims

according to
SI 9011744 B

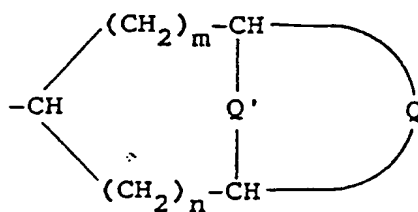
1. Compounds of the formula



(I),

in which

A represents the group

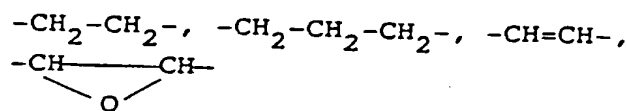


(II)

wherein

m and n independently of one another denote 1 ~~or 2~~

Q represents one of the double-bonding groups



and

Q' represents the group =NR or the group =NRR', wherein R denotes H or an optionally halogen-substituted or hydroxy-substituted C₁-C₄-alkyl radical, R' denotes a C₁-C₄-alkyl radical and R and R' together may also form a C₄-C₆-alkylene radical, and wherein, in the case of quaternary compounds, one equivalent of an anion (X⁻) opposes the positive charge of the N atom,

R₁ represents a thienyl, phenyl, furyl, cyclopentyl or cyclohexyl radical, wherein these radicals may also be methyl-substituted, thienyl and phenyl may also be fluoro-substituted or chloro-substituted,

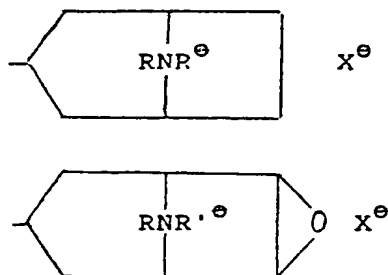
R₂ represents hydrogen, OH, C₁-C₄-alkoxy or C₁-C₄-alkyl,

R₃ represents H, F, Cl or CH₃, ~~and, if -NR denotes a secondary or tertiary amino group, also the acid addition salts~~

2. Compounds according to claim 1, wherein R₁ represents 2-thienyl.

3. Compounds according to claim 1 or 2, wherein R₂ represents OH.

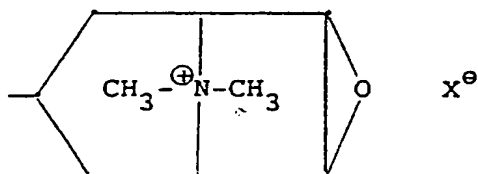
4. Compounds according to claim 1, 2 or 3, wherein A represents



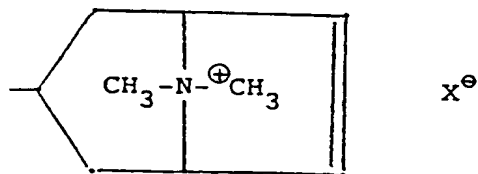


wherein R and X' have the above meaning and R' has the above meaning except for hydrogen.

5. Compounds according to claims 1 to 4, in which R_1 denotes 2-thienyl and A represents the radical



or



in the 3 α -form, wherein X⁻ is one equivalent of an anion, preferably Br⁻ or CH₃SO₃⁻.

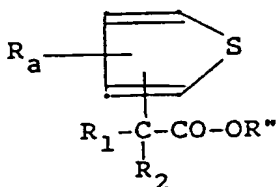
6. Medicaments characterised in that they contain a compound according to claims 1, 2, 3, 5 or 11 in addition to conventional auxiliaries and/or excipients.

7. Use of compounds according to claims 1 to 5 in the treatment of diseases.

8. Use of compounds according to claims 1 to 5 in the preparation of anti-cholinergic medicaments.

9. Use of compounds according to claims 1 to 5 in the preparation of medicaments for the treatment of respiratory tract diseases and sinus bradycardia.

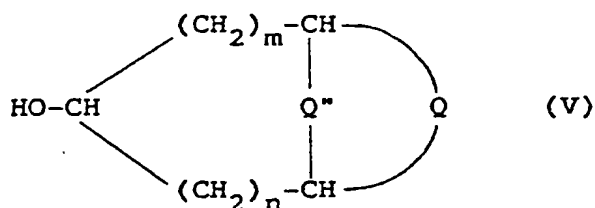
6. ~~10.~~ Process for the preparation of compounds according to claims 1 to 5, characterised in that an ester of the formula



(IV),

wherein R'' represents a C₁-C₄-alkyl radical and R₁, R₂ and R_a have the above meaning, is transesterified using an

amino alcohol of the formula



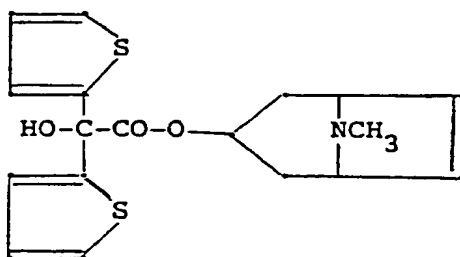
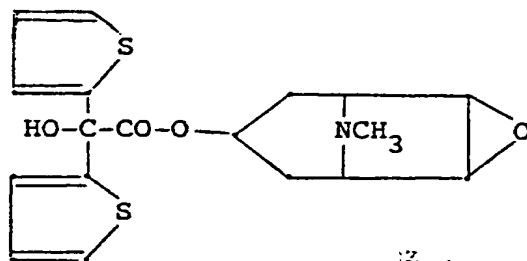
wherein m, n and Q have the above meaning and Q'' represents =NR or =NH, in an inert organic solvent or in a melt, in the presence of a transesterification catalyst, and the compound obtained is optionally quaternised

a) if Q'' denotes =NR (R ≠ H), using a reactive mono-functionalised derivative Z-(C₁-C₄-alkyl) of an alkane (Z = leaving group)

or is optionally substituted and quaternised

b) if Q'' denotes =NH, using a terminally disubstituted alkane Z-(C₄-C₆-alkylene)-Z without isolation of intermediates.

7. ~~11~~. Compounds of the formula



in the 3 α -form^{as} and their acid addition salts and their methobromides or methomethanesulphonates.

~~12. Use of compounds of the formula I, wherein Q' denotes =NR, and their salts as intermediate products for the preparation of the corresponding quaternary compounds of the formula I.~~